

ATTACHMENT C
RESOLUTION NO.
MONITORING AND REPORTING PROGRAM
FOR
GEORGE REED INC.
CALAVERAS TRANSIT MIX
CALAVERAS COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring wastewater, sumps, storage tanks, wash pads/paved areas, and (where applicable) groundwater. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

Field test instruments (such as those used to measure pH, electrical conductivity, and dissolved oxygen) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are calibrated prior to each monitoring event;
3. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of the MRP.

SUMP AND TANK MONITORING

Each sump and tank that receives wastewater shall be inspected weekly and monitored as follows:

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Freeboard	0.1 Feet	Measurement	Weekly	Monthly
Dissolved oxygen ¹	mg/L	Grab	Weekly	Monthly
Sump/tank condition ²	N/A	Observation	Weekly	Monthly

¹ Required only for wastes known to contain readily degradable organic compounds.

² Includes, but may not be limited to accumulation of solids that affects storage capacity; concrete cracks or spalling; coating cracks, separation, blistering, tearing; and any other signs of deterioration.

WASTEWATER AND RESIDUAL SOLIDS MONITORING

At a minimum, the Discharger shall monitor discharges to the waste management unit as follows:

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Wastewater				
Influent flow ¹	gpd	Meter reading	Daily	Monthly
Flow to recycling system	gpd	Meter reading	Daily	Monthly
Volume transported offsite for disposal	gpd	Meter reading	Daily	Monthly
Residual Solids (if applicable)				
Volume removed from sumps and tanks	cubic yards	Calculation	Daily	Monthly
Volume transported offsite for recycling or disposal ²	cubic yards	Calculation	Daily	Monthly

¹ Include wastewater and storm water flows.

² Records and receipts shall be maintained at the facility.

GROUNDWATER MONITORING

The Discharger shall monitor groundwater quality using all monitoring wells installed in accordance with an approved workplan. Prior to construction of any new groundwater monitoring wells, the Discharger shall submit plans and specifications to the Board for review and approval. Once installed, all new wells shall be added to the MRP, and shall be sampled and analyzed according to the schedule below.

Groundwater elevations shall be measured prior to purging. Each well shall be purged of at least three well volumes until pH and electrical conductivity have stabilized prior to sampling. Depth to groundwater shall be measured to the nearest 0.01 feet. Water table elevations shall be calculated based on surveyed wellhead elevations and used to determine groundwater gradient and direction of flow. Groundwater samples shall be collected using approved EPA methods. Groundwater monitoring shall include, at a minimum, the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling and Reporting Frequency¹</u>
Depth to groundwater	0.01 Feet	Measurement	Quarterly
Groundwater elevation	Feet	Calculated	Quarterly
Gradient	Feet/feet	Calculated	Quarterly
Flow direction	Degrees	Calculated	Quarterly
Total dissolved solids	mg/L	Grab	Quarterly
pH	--	Grab	Quarterly
Total Chromium	ug/l	Grab	Quarterly

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling and Reporting Frequency</u> ¹
Chromium VI	ug/l	Grab	Quarterly
Molybdenum	ug/l	Grab	Quarterly
Iron	mg/l	Grab	Quarterly
Aluminum	mg/l	Grab	Quarterly

¹ Beginning with 4th Quarter 2005

INSPECTION AND REPAIR

All sumps, tanks, wash pads, and paved areas used to collect wastewater shall be thoroughly cleaned, inspected, and repaired as needed at least once per year. The following is a minimum list of required annual inspection items:

1. For tanks, check for:
 - a. Cracks and holes;
 - b. Evidence of corrosion;
 - c. Leaking pipes and valves;
 - d. Secondary containment berm integrity;
 - e. Secondary containment storm water release valve function (e.g., proper seating when closed); and
 - f. Flow meter function.
2. For sumps, check for:
 - a. Concrete cracks and spalling;
 - b. Evidence of concrete chemical damage;
 - c. Leaking pipes and valves;
 - d. If the concrete is coated, check for cracks, tears, abrasion, and UV damage;
 - e. Leak detection system function; and
 - f. Flow meter function.
3. For wash pads and paved areas, check for:
 - a. Concrete cracks and spalling;
 - b. Damaged caulking;
 - c. Evidence of concrete chemical damage;
 - d. Evidence of curb damage; and
 - e. If the concrete is coated, check for cracks, tears, abrasion, and UV damage.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, pond, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported in the next scheduled monitoring report.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all Groundwater Monitoring Reports shall be prepared under the direct supervision of a California Registered Engineer or Geologist and signed by the registered professional.

A. Monthly Monitoring Reports

Monthly Monitoring Reports shall be submitted to the Regional Board by the **1st day of the second month following monitoring** (i.e. the January Report is due by 1 March). At a minimum, the Monthly Monitoring Report shall include:

1. Results of sump, tank, leak detection system, and wastewater/residual solids monitoring.
2. A scaled map depicting the locations of all sumps, tanks, wash pads/paved areas, and the locations where freeboard is measured.
3. A comparison of monitoring data to the discharge specifications and an explanation of any violation of those requirements. Data shall be presented in tabular format.
4. If requested by staff, copies of laboratory analytical report(s).
5. A calibration log verifying calibration of all monitoring instruments and devices used to comply with the prescribed monitoring program. A discussion of all off-site industrial waste disposal, including the names and addresses of haulers and disposal facilities utilized during the month.
6. All activities performed to correct problems noted during weekly inspections.

B. Quarterly Monitoring Reports

The Discharger shall establish a quarterly sampling schedule for groundwater monitoring such that samples are obtained approximately every three months. Beginning with the **4th Quarter 2005**, Monitoring Reports shall be submitted to the Board by the **1st day of the second month after the quarter** (i.e. the January-March quarter is due by May 1st) each year. The Quarterly Monitoring Report shall include the following:

1. Results of groundwater monitoring. The results of regular monthly monitoring reports for March, June, September and December may be incorporated into their corresponding quarterly monitoring report.

2. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with this waiver, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged;
3. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any;
4. A narrative discussion of the analytical results for all groundwater locations monitored including spatial and temporal trends, with reference to summary data tables, graphs, and appended analytical reports (as applicable);
5. A comparison of monitoring data to the groundwater limitations and an explanation of any violation of those requirements;
6. Summary data tables of historical and current water table elevations and analytical results;
7. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum;
8. Copies of laboratory analytical report(s) for groundwater monitoring.

C. Annual Monitoring Report

An Annual Monitoring Report shall be prepared as the twelfth monthly monitoring report. The Annual Monitoring Report shall include all monitoring data required in the monthly monitoring schedule and shall be submitted to the Regional Board by **1 February** each year. In addition to the data normally presented in the Monthly Monitoring Reports, the Annual Monitoring Report shall include the following:

1. The contents of the regular monthly monitoring report for the last month of the year;
2. The contents of the regular groundwater monitoring report for the last sampling event of the year and an evaluation of the groundwater quality beneath the facility;
3. If requested by staff, tabular and graphical summaries of all monitoring data collected during the year;
4. A report of results for the annual inspection program, a complete description of all problems noted, and a complete description of repairs or replacements implemented to provide continuous complete containment of the waste.
5. A discussion of compliance problems and any corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements;

6. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program;
7. A summary of information on the management and disposal of sediments, including names and address of disposal facilities, dates of shipment, and quantity shipped;
8. A forecast of influent flows for the coming year, as described in Standard Provision No. E.4.

A transmittal letter shall accompany each self-monitoring report. The letter shall discuss any violations during the reporting period and all actions taken or planned for correcting violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain a statement by the Discharger or the Discharger's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate, and complete.